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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/601,537

06/23/2003

Georg Denk

MAS-FIN-196

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EXAMINER

DO, CHAT C

ART UNIT

PAPER NUMBER

2193

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/601,537	Applicant(s) DENK ET AL.	
	Examiner Chat C. Do	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This communication is responsive to Amendment filed 01/02/2007.
2. Claims 1-18 are pending in this application. Claims 1-9, 11, and 13-18 are independent claims. This Office Action is made non-final after a RCE filed 01/02/2007.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-18 cite a method, program, computer readable medium, and a system for generating a sequence of random number according to a mathematical algorithm which is considered as an abstract idea. In order for claims to be statutory, claims must be either include a practical application at useful or a concrete, useful, and tangible result.

However, claims 1-18 are directed to a method, program, computer readable medium, and a system which solely solves a mathematical expression to generate a set of random numbers without disclosing a particular practical application of that mathematical expression as generating a sequence of random number based on a covariance matrix.

They also fail to produce a useful and tangible result. In detail additional to above analysis, claims 1-2 and 13-14 are purely mathematical operation in computer system;

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claims 3-4, 15-16, and 17-18 are simulation system but fails to disclose any hardware components for simulating the system; claims 5-6 are directed to purely software per se, which lacking storage on a medium to enable any underlying functionality to occur; claims 7-8 are directed to a medium claims of an abstract ideal; and finally claims 9-12 raise an issue of preemption, which attempt to claim every substantial practical application of an abstract idea and further these claims are carrier signal claims as download methods. Therefore, claims 1-18 are directed to non-statutory subject matter.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 5-6, 16, 18, 27-30, 37-38, and 41-42 of copending Application No. 10/289,827. Although the conflicting claims are not

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identical, they are not patentably distinct from each other because: claim(s) 1-2, 5-6, 16, 18, 27-30, 37-38, and 41-42 of Application No. 10/289,827 contain(s) every element of claim(s) 1-18 respectively of the instant application and thus anticipate the claim(s) of the instant application. Claim(s) of the instant application therefore is/are not patently distinct from the earlier patent claim(s) and as such is/are unpatentable over obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim.

"A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Lonqi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140 F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness-type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001).

"Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "anticipated" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4 . This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982); Schneller, 397 F.2d at 354. Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

Response to Amendment

6. The amendment filed 01/02/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall

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introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Re claims 1-2, the newly added limitation “storing” is not sufficiently supported in the original specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Response to Arguments

7. Applicant's arguments filed 01/02/2007 have been fully considered but they are not persuasive.

a. The applicant comments in pages 12-15 for claims rejected under 35 U.S.C. 101 that the amended claims sufficiently overcome the rejection under 101 by inserting the limitation “storing” as physical stored for used in the real application wherein the support of the “storing” is inherently seen in the original specification as cited in page 20 line 18 to page 21 line 2. Further, the applicant argues that the limitation “simulating the technical system and outputting the result of the simulation” would provide a concrete, useful, and tangible result wherein the tangible result is the result of the technical simulation.

The examiner respectfully submits that the applicant had missed to interpret the examiner's rejection under 101 and response to the previous argument. For further address in detail, examiner has clearly addressed and pointed out why every single claim in the pending application is directed to non-statutory subject matter. Basically even if the limitation “storing result in a computer system” is

sufficiently supported in the original specification, which is not, the claims are still directed to non-statutory subject matter because the claims have either a practical/physical real world application or a concrete, useful, and tangible result regardless whether or not the claims are implemented in computer system. In general, claims 1-18 do not cite any practical/physical real world application for utilizing the result of mathematical operations (e.g. without the real world application, the result of mathematical operations is just an abstract idea). Even though some of claims disclose a simulation of technical system, however according to the specification, the technical system is no more than just another mathematical operations without any particular or specific hardware support. Thus, claims involving with technical system disclose a concrete result which is a random number but fail to disclose a useful and tangible result as required under 35 U.S.C. 101. Therefore, claims 1-18 are clearly directed to non-statutory subject matter.

- b. The applicant comments in page 17-18 for claims rejected under double patenting that a timely terminal disclaimer is submitted in one of the pending application if the claims of the pending applications remain obvious over each other at the time of allowance of either of these pending application.

The examiner respectfully acknowledges the applicant's comments and the double patenting rejection will be withdrawn if either a timely terminal disclaimer is filed for the first allowed application or the claims of pending application are no

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longer remained obvious over each other. At this moment, the rejection is maintained for purpose of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do
Examiner
Art Unit 2193

February 16, 2007

